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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,139	12/02/2003	Daniel W. English	CDPC-P01-011	5324
28120	7590	06/06/2006	EXAMINER	
FISH & NEAVE IP GROUP ROPES & GRAY LLP ONE INTERNATIONAL PLACE BOSTON, MA 02110-2624			SORRELL, ERON J	
			ART UNIT	PAPER NUMBER
			2182	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/727,139	ENGLISH, DANIEL W.	
	Examiner	Art Unit	
	Eron J. Sorrell	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

Art Unit: 2182

DETAILED ACTION

*Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-11 and 13-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 1 recites limitation comprising "allowing" and "having" a card to perform a desired function. It is unclear what the applicant's intended metes and bounds of the claims are since the claim appears to cover anything and everything that does not prohibit those actions from occurring.

4. Claims 2 and 19 depended from themselves. It is unclear to the Examiner how to determine the scope of these claims. It is the position of the Examiner that claim 2 should depend from claim 1 and claim 19 should depend from claim 12, and the claims will be examined as such.

Art Unit: 2182

5. Referring to claims 13-20, these claims recite a "system" in the preamble, however the claims are dependent, directly or indirectly, on claim 1, which recites a "process." It appears that these claims should depend from claim 12, and will be examined as such, however, appropriate correct is required.

*Claim Rejections - 35 USC § 101*

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Since claim 1, recites limitations comprising "allowing" and "having" a card perform something, instead of positively reciting that the card performs those functions, there does not seem to be a useful, concrete, and tangible result as required (see Annex II of the Interim Guidelines for Patent Subject Matter Eligibility).

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2182

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-4, 6-14, and 16-20 are rejected under 35 U.S.C.

103(a) as being unpatentable over Fletcher et al. (U.S. Patent No. 3,783,250) in view of Abbondanzio et al. (U.S. Patent No. 6,931,568 hereinafter "Abbondanzio").

9. Referring to method claim 1, and system claim 12, Fletcher teaches a system for arbitrating between an active state and a protected state, comprising:

a plurality of devices capable of exchanging data (see items labeled computer A - computer D and the busses connecting them in figure 1, and lines 3-6 of column 3);

a computer monitor for monitoring parameters of other computers in the system representative of operating characteristics (see lines 61-65 of column 7);

a vote out mechanism, responsive to the monitored parameters, for generating a vote signal representative of an assessment of a computers operating condition (see lines 3-7 of column 8); and

Art Unit: 2182

a vote tally mechanism, responsive to vote signals received from a computer in the system, and capable of changing an operational state of computer in response thereto (see lines 11-18 of column 8).

Fletcher fails to teach the "card" environment claimed by the applicant, wherein each computer module is implemented as a card, and the plurality of cards are capable of communicating with each other.

Abbondanzio teaches, in an analogous system, computer modules implemented as cards that arbitrate between an active and protected state in the applicant's claimed environment (see lines 42-45 of column 3).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the teachings Fletcher with the above teachings of Abbondanzio in order to reduce the overall physical size of the system.

10. Referring to method claim 2 and system claim 13, Fletcher teaches A the vote tally mechanism includes a processor for detecting a majority vote with vote signals received (see lines 3-18 of column 8).

Art Unit: 2182

11. Referring to method claim 3 and system claim 14, Fletcher as modified by Abbondanzio teaches isolation processor for isolating the card as a function of delivered votes (see 31-36 of column 12, note only the operational computers are allowed to communicate).

12. Referring to method claim 4 and 6, and system claim 18, Fletcher teaches self-diagnostic process for testing local parameters representative of local status (see paragraph bridging columns 28 and 29).

13. Referring to claim 7, Fletcher isolating a card includes disabling a hardware interface to an external system bus (see lines 29-39, wherein Fletcher teaches communication with an external system bus. If the device is or becomes disabled, it is prevented from transferring any data).

14. Referring to method claims 8 and 9, and system claim 19 and 20, Fletcher as modified by Abbondanzio teaches the self-diagnostic process includes means for altering a state of the card, wherein the self-diagnostic process includes means for driving a card into an isolation state (see paragraph bridging columns 7 and 8).

Art Unit: 2182

15. Referring to claim 9, Fletcher teaches the self-diagnostic test includes monitoring a heartbeat timer (see paragraph bridging columns 28 and 29).

16. Referring to claim 11, Fletcher teaches monitoring a control signal representative of an instruction to adjust between a protection state (inactive state) and an active state (see lines 30-35 of column 10).

17. Referring to claim 16, Fletcher teaches the card monitor includes means for detecting an error in a data signal received from a card (see item 257a and 257b in figure 13).

18. Referring to claim 17, Fletcher teaches a lock circuit for requiring a processor to perform a series of predetermined operations to gain access to a memory location (see lines 4-18 of column 28).

19. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher in view of Abbondanzio as applied to claims 1 and 12 above, and further in view of Beilinski et al. (U.S. Patent No. 5,123,089).



Art Unit: 2182

20. Referring to claims 5 and 15, Fletcher teaches making a determination of the health of a card includes identifying a parity error (see item 257a and 257b in figure 13), however the combination of Fletcher and Abbondanzio fails to teach determining the health further comprises measuring response time, identifying a check sum error, and identifying a failure to respond to a command.

Beilinski teaches, in an analogous system, determining the health of a device wherein the determination includes measuring response time, identifying a check sum error, and identifying a failure to respond to a command (see lines 46-54 of column 9).

It would have been obvious to one of ordinary skill in the art the time of the applicant's invention to modify the combination of Fletcher and Abbondanzio with the above teachings of Beilinski in order to reduce the chance of propagating different types of errors through the system.

#### *Conclusion*

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following document is cited to further show the state of the art as it pertains to the applicant's invention:

U.S. Patent No. 5,630,046 to Loise is cited as it teaches a fail-tolerant system comprising a voting mechanism.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J. Sorrell whose telephone number is 571 272-4160. The examiner can normally be reached on Monday-Friday 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
KIM HUYNH  
SUPERVISORY PATENT EXAMINER

5/26/06